STUDY PROJECT

OPERATIONAL LEVEL INTELLIGENCE: INTELLIGENCE PREPARATION OF THE BATTLEFIELD

BY

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31 MARCH 1989

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The renewed attention to warfare at the operational level has revived interest in many combat support functions at the operational level. Operational level intelligence analysis and operational level intelligence preparation of the battlefield (IPB) are such areas. While much published doctrine and actual IPB exist for tactical level warfare, less is available for operational level use. This paper proposes an analytical framework for conducting operational level IPB and suggests modifications to existing

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OPERATIONAL LEVEL INTELLIGENCE: INTELLIGENCE PREPARATION OF THE BATTLEFIELD

AN INDIVIDUAL STUDY PROJECT

by

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ABSTRACT

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The renewed attention to warfare at the operational level has revived interest in many combat support functions at the operational level. Operational level intelligence analysis and operational level intelligence preparation of the battlefield (IPB) are such areas. While much published doctrine and actual IPB exist for tactical level warfare, less is available for operational level use. This paper proposes an analytical framework for conducting operational level IPB and suggests modifications to existing tactical level IPB practices in areas of terrain, weather and the enemy forces so these areas of analysis may be applied to operational level IPB.

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CHAPTER I

INTRODUCTION

This paper responds to a request from the United States Army Intelligence Center and School to develop an analytical framework for intelligence preparation of the battlefield for the operational level of war And specifically, to suggest modifications to existing tactical level intelligence preparation of the battlefield processes so the processes can be applied to operational level intelligence estimates focusing on terrain, weather, and enemy forces.

BACKGROUND

Tactical level intelligence preparation of the battlefield (IPB) traditionally "integrates enemy doctrine with weather and terrain as they relate to the friendly mission and the specific environment."[1] It is cyclic, continuous, and begun before the battles and engagements of tactical level warfare. The tool of tactical level IPB, when executed properly, aids commanders and their intelligence officers. Techniques of tactical level IPB are not new, and tactical IPB is a widely applied military intelligence procedure. Field Manual (FM) 34-1, Intelligence and Electronic Warfare Operations, 2 July 1987, and FM 34-3, Intelligence Analysis, 13 January 1986, both detail "how" and "why." These manuals focus mostly, but not exclusively, on echelons Corps and below (ECB) or primarily at tactical levels. In an article in October 1987, Captain Larry V. Buel discussed

the application of the IPB to the operational level of war.[2] He pointed out that the IPB methodology provided a framework for use in operational level intelligence analysis. He concluded that current tactical level IPB should expand to meet operational level requirements. This paper suggests an analytical framework for looking at IPB at the operational level and suggests modifications to tactical level IPB described in FM 34-3. A brief discussion of the operational level of war provides a rationale for the interest in operational level IPB before turning to consideration of an analytical framework and suggested modifications to existing tactical IPB.

RATIONALE FOR INTEREST

Operational level warfare is an area of renewed military study. Operational level warfare links tactical level warfare with the strategic level. It is neither a newly invented nor previously unknown element of warfare. Examples of operational level activity by armies and army groups can be found from the mid-1800's through the Korean War. Following Korea operational level warfare dropped from routine US Army study. Not until the late 1970's did it begin to reemerge with discussions of concepts such as AirLand Battle, Deep Attack, and Follow-on Forces Attack.

Concomitantly, some of the combat support functions associated with operational level warfare fell into disuse between Korea and the late 1970's. In some instances functions withered; in others they shifted down to tactical levels or up to strategic levels. Intelligence and related intelligence

functions fell into both categories. Many analytical skills and some intelligence systems went to tactical levels while others were incorporated into strategic and national levels. Now as operational level warfare regains its linking position between strategy and tactics in the structure of warfare[3] and the combat support functions are reexamined, intelligence support of operational level warfare is being scrutinized.

FM 100-5, Operations, 5 May 1986, states that "operational art is the employment of military forces to attain strategic goals in a theater of war or theater of operation..."[4] Thus operational level intelligence support must be in consonance with operational art and must be operational in perspective. Most often at tactical levels defeat of enemy armed forces is synonymous with victory and attainment of tactical goals. Attainment of strategic goals also may focus on enemy armed forces. However, at the operational level attainment of strategic goals may require defeat of a political system, destruction of industrial capacity, or elimination of a social system or religious restrictions. Strategic goals might include protection for a democratic election or support to building transportation infrastructure. The preeminence of focus solely on military forces at the tactical level may shift at the operational level. While defeat of enemy armed forces still may be critical at the operational level, ultimate attainment of victory, war termination and achievement of strategic goals may involve more. For this paper these additional factors which are not purely military power are considered to be part of political,

economic or socio-psychological power. Operational level intelligence, including operational level IPB must be prepared to consider aspects from all four of these elements of power, even if some are subsequently discarded.

Operational level IPB must provide unconstrained intelligence to aid the commander's decisions on where and when to accept battle and how to move and place forces and resources. Tactical level IPB methodology still is useful, but the perspective of the intelligence officers must come out of the foxhole and away from the line of contact. It is the operational level intelligence IPB which requires attention and update. The following suggested analytical framework provides a way to consider the operational level IPB. Then Chapter 3 recommends specific changes to current tactical level IPB to make the process applicable to the operational level for enemy forces, weather, and terrain.

ENDNOTES

1. U.S. Department of the Army, Field Manual 34-3, Intelligence Analysis, Washington, 13 January 1986, p. 4-2.

2. Larry V. Buel, "Intelligence Preparation of the Battlefield," Military Review, Vol. LXVII, October 1987, pp. 24-33.

3. U.S. Department of the Army, Field Manual 100-5, Operations, Washington, 5 May 1986, p. 9.

4. Ibid., p. 10.

CHAPTER II

ANALYTICAL FRAMEWORK

Those who mainly rely on or are more familiar with checklists and overlays to fill in blanks and derive IPB templates may suffer discomfort moving from the more structured environment of the tactical level of IPB to the less structured operational level of IPB. Much of the proposed analytical framework for operational level IPB is based on broad and generalized ways of thinking. The tactical level IPB process builds from specifics to a focused range of conclusions or courses of action. The proposed operational level analytical framework starts from the desired result and works to determine conditions for success sometimes using tactical level IPB procedures and sometimes augmenting the procedures.

The developed tactical level IPB process, that is the approach of sorting information, the means of displaying intelligence data, and analytical process are in broadest concept applicable to the operational and strategic levels of war intelligence support. For example at brigade or division levels IPB is usually displayed on 1:50,000 scale map overlays. Sometimes this takes a sheet or two of plywood to hold the maps. At Corps level sliding panels of the same scale map suffice. However, at a theater of operation this would require a gymnasium floor to hold all the maps. This unrealistic example is only to point out that perspectives change at the operational level. If the concepts and mechanics don't shift also potential values of IPB results will be lost.

The principle of using map overlays or templates remains valid. Use of 1:50,000 or larger scale maps for selected areas will be required in some cases. But in overview, a mechanistic expansion of tactical IPB may overwhelm and lose key points in excessive detail. In another example, the same may be said about the familiar enemy force structure templates depicting battalion wide maneuver corridors if such corridors were displayed for an entire theater. Enemy forces and avenues of approach remain important considerations, but perspective shifts to the operational level to meet operational art and operational level commander requirements for intelligence support.

As perspective shifts to the operational level other elements such as economic, political, and socio-psychological power also may come into consideration. While military forces or military power will be key, these others may become much more important than at tactical levels. Additionally these elements most likely will not be easily displayed on the templates familiar at tactical level IPB. Therefore, not just perspective shifts, but the elements of power to consider grows. Also the traditional templates of tactical level IPB must be augmented by various maps of different scales, use of templates where more traditional templates still work, preparation of overlays for key points from the non-military elements of power, and production of stylized briefings, charts, and fact sheets. The point here is not to propose means to accomplish operational level IPB, but to emphasize that the proposed analytical framework is not restricted just to the means used for tactical level IPB.

The start point for an operational level IPB analytical framework is the operational commander's mission statement or equivalent coupled with his vision or concept of operation. At the operational level implied missions cannot be overlooked. Attention must be paid to exactly what strategic aims are to be accomplished, how victory is defined, what is included in war termination and what are war termination requirements. Thus success may be more difficult to define than at tactical levels. However, once an understanding of success and mission accomplishment is made operational level IPB can begin. The process walks backward from the general mission to be accomplished, through the four elements of power (military, economic, political and socio-psychological) to the specifics to be destroyed, defeated or acted upon.

Mission, enemy, terrain, troops, and time (METT-T) provide a beginning for the analytical framework and ongoing data collection and analysis just as in tactical levels. Focus shifts to operational level formations. The larger enemy formations and supporting logistics become key. What to display, array, or summarize must be considered in light of the requirements of warfare at the operational level. In another example, low intensity conflict (LIC) operations might be in only one country. Key logistics and support areas may be located across a border, and operations across the border may be prohibited. Once the logistic and support area's importance to the LIC situation is demonstrated, the strategic goal of neutralizing it can be raised to higher or highest levels for action. As with the map example

earlier, this is oversimplified. However, similar examples can be made for troublesome or helpful ethnic minorities, dissident political groups, potential religious differences, political or nationalistic unrest, economic or industrial vulnerabilities or other non-military areas. Tactical level IPB normally considers mainly armed opposition or enemy military forces. Operational level IPB while focussed on military power cannot be limited to just military power and larger key enemy formations.

Operational level military activities are directed against opposing armed forces to disrupt command and control and break up the tempo of their operations, killing and destroying where possible. Thus the operational level IPB puts priority on enemy forces, especially large unit formations, logistics and support, command and control and major lines of communications. Returning to the earlier map example, cross country movement corridors for battalion and brigade units are important near the front line of own troops (FLOT) but lose relative importance 500 kilometers behind the FLOT. On the other hand major rail yards and key bridges usually retain importance throughout an area of operation. The operational level analytical framework must sort information for operational vice tactical levels and make sure the IPB process yields operational level information.

The analytical framework takes the operational commander's mission and measures of success discussed earlier. Then it takes the mission, etc. and works backwards going from the general to the specific dealing with the military element of power. Then the analytical framework does the same for the less familiar

elements of economic, political, and socio-psychological power (Figure 1). The search is for factors that can be used to gain friendly advantage or preclude enemy advantage. The intent is to find factors which limit, restrict, or kill enemy forces, or that benefit friendly operations, and in aggregate achieve mission success. Some actions may directly impact ongoing tactical level battles while others may be indirect and build toward future success.

When analyzing military and economic elements of power, factors which yield advantages likely are more tangible and fixed. Frequently factors from military and economic areas are within the knowledge and experience of military intelligence analysts. Examples might include major petroleum refineries, large electrical power generating plants, or major weapons production and storage facilities. Data and information overload may occur on the initial backward walk from the general to the specific. It is also likely that frustration will occur because many of the decisions about what is important are judgmental, subject to discussion and even disagreement. But at operational levels IPB is repetitive and refinements will take place. It is also apparent that operational level IPB is time consuming and must be started well in advance.

The areas of political and socio-psychological power likely will be less familiar to the intelligence analyst. Further, these areas are less tangible and even when understood may be

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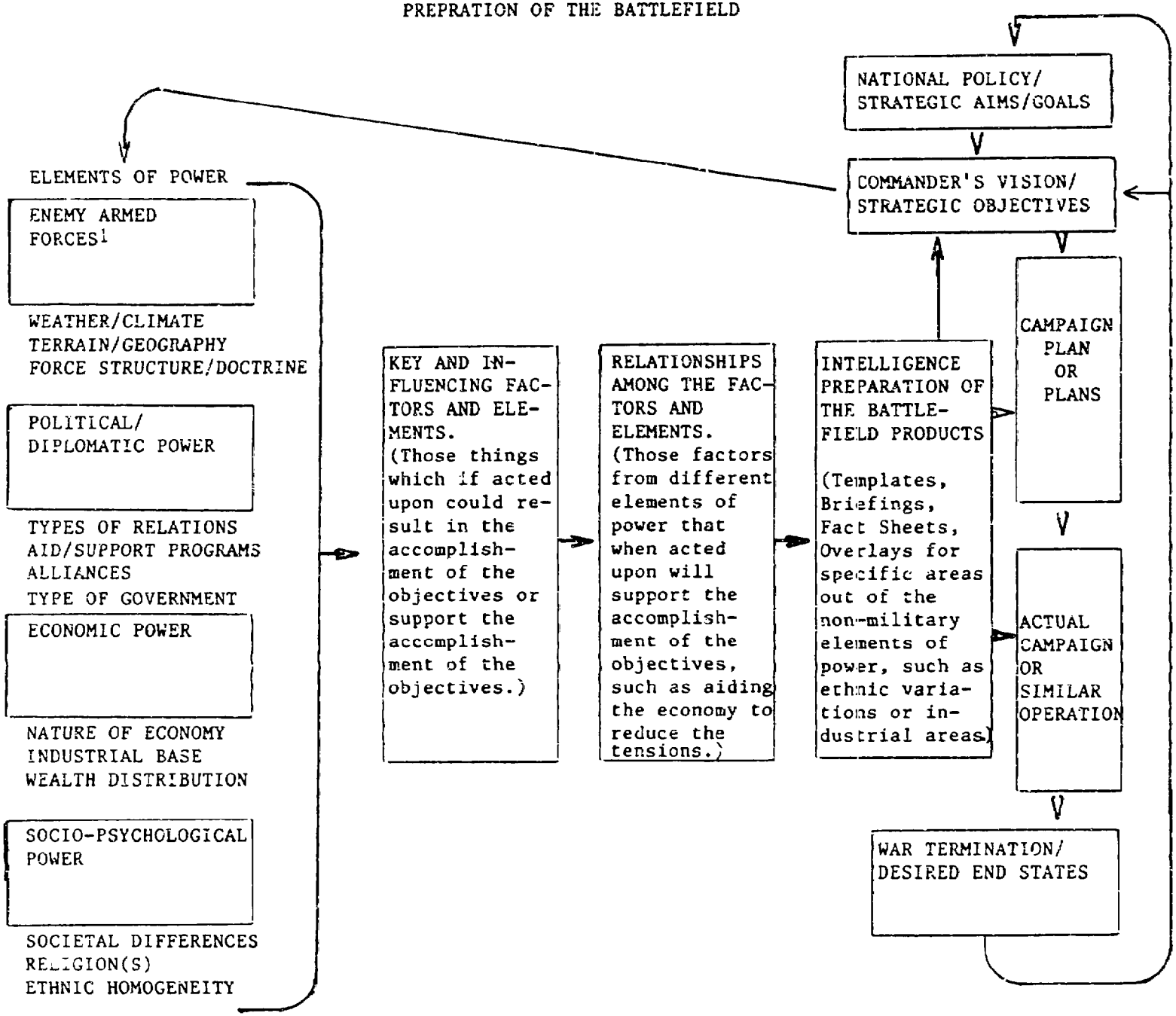

(1) Principle area of focus for tactical level IPB

FIGURE 1

more difficult to act on, especially with military force. One the other hand knowing ethnic homogeneity and political unity of the potential foe may be operationally significant.

In operational level IPB, analysis continues to examine the opposing armed forces and other elements of power until key relationships are confirmed or denied. These relationships are reviewed and the process repeated to determine which relationships if eliminated, neutralized, or destroyed would either contribute directly to or cause the accomplishment of the strategic mission.

As described above, the analytical process is subjective and iterative. Initial answers will be contentious with the least divisive being those pertaining to military matters. All things considered, this analytical framework and the results of this process of working from general to specific form an operational IPB. It is at this point that the more familiar bottoms up tactical level IPB processes could be used to provide more specific detail about some factor identified by the operational level IPB analytical process. The operational level IPB analytical framework takes the four elements of power, works from general goals as derived from strategic objectives to get relationships or factors which may be exploited by operational means and achieve operational objectives. The initial result is coarse-grained in overview with subsequent operational level IPB iterations providing the fine-grained evaluations. Each iteration as it is accomplished will point out considerations which may add, delete, refocus, etc., initial factors and

relationships identified by the analysis. This is positive because one of the purposes of the operational level IPB is to have an understandable, repeatable process.

A review of the analytical framework for operational level IPB is necessary at this point. The mission and requirements for success have been determined. These have been reviewed in light of the four elements of power--military, economic, political, and socio-psychological. Working from the general areas to the specific, factors and relationships have emerged which may be influenced to obtain the mission and requirements for success. Findings are subjective and continuously refined. The enemy armed forces likely are the key element in achieving the strategic objectives but other non-military factors may emerge. This is especially true in a LIC environment or in conflicts away from the high intensity area of the spectrum of conflict.

The operational level IPB analytical framework must include consideration of specific intelligence support for the operational commander in two areas. These areas stand out when considering intelligence analysis at the operational level and must be kept in mind in operational IPB analysis.

--Movement of enemy forces, both combat and support forces, including associated logistics; and

--Employment of operational level fire power;

Additional discussion of each area is necessary before turning to suggested modifications to the tactical IPB process.

First, movement of forces. The intelligence analysis must cover the entire theater of operations and recognize the joint and combined nature of the enemy forces. The factors of METT-T and the format proposed by the U.S. Army War College report, "Campaign Planning[1]" could be used to satisfy the theater-wide requirements. Concerning operational level intelligences for movement of forces, special attention should be focussed on:

--Indications and warnings on enemy forces' locations, activities, and movements of a scale or size important to the operational commander;

--Intelligence support of deception operations by friendly forces, and suspected enemy force deception operations;

--Determination of enemy force structure, doctrine, current operation commanders' personalities;

--Adjusting enemy doctrine and force structure templates for an operational perspective;

--Predictive analysis, even though this is high risk; and

--Maintaining focus at the operational level and on those items leading to the accomplishment of the strategic mission.

While not inclusive, the intelligence process can aid the operational level commander in moving his own forces by ensuring the intelligence analytical framework includes consideration of the above.

Operational level commanders also have firepower to influence operational objectives. Intelligence analytical frameworks should include provision for or recognition of the following:

--Fires at operational levels are the coequal of maneuver as a means of influence; target development is key and determination of high value targets critical;

--"Firestrikes" are an operational level resource of primary importance; in some instance they may actually replace maneuver forces at operational levels;

--Fire support will likely be conducted on a "Decide, detect, destroy" basis vice the "Detect, decide, destroy" basis found at tactical levels;

--Fires must be directed at operational level targets first; support to ECB may not be first priority except to prevent defeat.

--Emerging technologies likely will be used to aid fires at operational levels;

--Fires on all targets from the areas of the four elements of power should be considered; and

--Fires are used to shape events and not always in reaction to enemy activities.

Certainly movement of forces and use of firepower is important for tactical level IPB. The points added here on those two areas highlight considerations of special importance for operational level IPB.

In summation, the operational level analytical framework is a continuation of the methodological way of thinking found in tactical level IPB but expanded in scope to allow for more than just military power and to elevate IPB to operational levels. The framework is less mechanistic than tactical level IPB but still a reasoned, sequential, and repetitive movement from the general objectives to the specifics necessary to accomplished at the operational level to gain success. The results of any one iteration are not immutable but are refined or reverified as each iteration is done. Finally, the operational level IPB is a much more subjective process going from the general to the specific than is the tactical level IPB which builds on a progressive basis from the specific to lead to one or two most likely alternatives for enemy courses of action.

The operational level intelligence analysis framework is a means, not an end. Several key operational factors which must be kept in mind were highlighted for inclusion in the analytical framework. What follows are suggested changes, additions, or deletions to the traditional tactical level IPB areas of terrain, weather, and enemy forces so the process can be worked at operational levels.

ENDNOTE

1. William W. Mendell and Floyd T. Banks, Campaign Planning, Carlisle Barracks, PA, 4 January 1988, p. B-8-1. Note: This book is an excellent summary source for reviewing the operational level campaign plans in existence or in some stage of preparation. It provides insight into what operational commanders are thinking about or what they should be thinking about. Thus it provides intelligence officers with areas the commander likely will go.

CHAPTER III

SUGGESTED MODIFICATIONS

As previously discussed, the tactical level IPB process is already an accepted and useful tool. The following suggested operational level modifications build on this established base found in FM 34-3, Intelligence Analysis. Every effort has been made to modify existing practices and compliment existing procedures moving from tactical to operational level IPB. New material is added where the change in perspective demands. The method of suggesting changes is to list in summary form what is being done currently for tactical level IPB in the left column and to suggest additions, deletions, or changes in the right column for operational level IPB. This technique assumes a familiarity with or access to FM 34-3.

TERRAIN

Terrain analysis for operational level IPB uses the skills and techniques found in tactical level IPB but in a different mixture. Less emphasis is placed on detailed terrain analysis and more on the fixed facilities and their interconnecting lines of communication. For example, cross country mobility for combat forces is likely less important in a theater-wide perspective than rail-to-road transshipment points. The positioning and resupply and support of operational level forces some distance behind the FLOT generates different requirements about the

terrain than movement to contact and fighting forces at the FLOT. The operational level IPB results will be a mixture of detail in some areas and broad generalizations in others. This contrasts with tactical level IPB for terrain which is uniformly detailed throughout.

Tactical Level IPB	Operational Level IPB
--IPB area of influence or interest determined by doctrine for ECB.	--IPB area expanded to cover part or all of a theater of operation, including adjacent land, sea, and air space.
--IPB done using 1:50,000 scale maps with some use of 1:250,000 scale.	--IPB done on 1:100,000 or 1:500,000 scale; use 1:50,000 or 1:250,000 scale only for specific operational targets, actions or areas where key armed forces may be located.
--Equal and intense detail is used throughout area of influence and frequently area of interest when time and resources permit.	--Uniformly intense detail used rarely; unequal detail is the rule with tactical level type detail required only in selected areas supporting specific operational requirements.
--All aspects of terrain are potentially important, i.e., off-road mobility frequently as important as on-road mobility.	--Fixed, man-made aspects and facilities are usually more important than the theater-wide cross country mobility; major natural features such as rivers and mountain may be critical.
--Effects of terrain on the actual conduct of combat are critical.	--Effects of terrain on movement, positioning and supporting forces are most important; actual combat may take second place to ability to move forces and conduct sustainment.

--Key terrain is more easily determined; usually it is dominant geographic features or principle lines of communication.	--Key terrain may be less obvious and sometimes influenced by non-military elements of power such as the capital and political center of a country.
--Extreme emphasis is placed on military aspects of terrain (observation, fields of fire, cover and concealment, obstacles, key terrain, avenues of approach, and mobility).	--Military aspects remain important; but are supplemented by economic, political, socio-psychological details, such as a nation's capital or economic heartland.
--Weather is more important than climate; daily impact of variations are important, especially for mobility and aviation support.	--Climate is likely more important than weather, emphasis shifts to longer periods of time such as weeks or months when major activities may be possible or precluded.
--Line of sight is important for weapons, communications, or for concealment.	--Line of sight and the time spent determining it are much less important; this key part of tactical level IPB all but drops out of operational level IPB, except when part of the theater's character as in Korea.
--Non-military aspects of terrain are usually less important; tactical level IPB for LIC may be an exception.	--The importance of political, cultural, ethnic, religious, and racial groupings and differences grow and may be key to operational successes; these aspects must be shown for operational level IPB, unless consciously discarded after consideration. This is an expansion of the term terrain as used in tactical IPB to the term geography at operational levels.

--Adjacent areas are less important except for knowledge of who is on the boundaries.	--Adjacent areas are more important since they frequently or enemy operational level disposition or movement of forces or for support operations.
--Adjacent areas are usually less important for tactical level deception efforts.	--Adjacent areas grow in important since operational level deception operations may in fact originate in adjacent areas or be part of such an operation.
--Adjacent areas are usually less important in terms of psychological operations or civil affairs activities.	--Adjacent areas are usually more important if psychological operations or civil affairs activities are included in the theater or operation.

The modifications suggested for the terrain IPB area to move the perspective from tactical to operational level directly reflect the perspective shift from the battles and engagements of tactical level warfare to the conduct of operations found at operational level warfare. The fine grained perspective applied rather evenly across the terrain for tactical levels becomes coarse grained at the operational level. In the situation where economic, political, and socio-psychological factors play a role the concept of terrain analysis expands to the broader concepts of geography when these factors are operationally significant. Fine grained terrain IPB at the operational level is infrequent except for targeting, such as long range missiles, air interdiction, or special or unconventional operations.

WEATHER

This section concerning weather contains fewer suggested modifications than the sections on terrain or enemy forces. This is not because weather is less important; in fact it is just the opposite. That is, most of the concerns about weather which are part of tactical level IPB are equally applicable at operational levels. Suggested modifications come from the differences in perspective as one moves from tactical to operational levels. The biggest perspective change generally is one of thinking more about daily weather at tactical levels but longer range climate at the operational level.

Tactical Level IPB	Operational Level IPB
--Focus is on immediate or near term battle or engagement, weather now and for the next few days is of primary interest.	--Scope includes the weather of today and the near term; IPB expands to climatology and interest in broad, seasonal changes affecting not only initiation of operations but also conclusion and follow-on activities.
--Main concern frequently may be the affect on cross-country mobility.	--Emphasis shifts from focus on cross-country mobility to weather's impact on such things as ports of entry, transshipment facilities, and on major fixed transportation facilities, lines of communication, and air operations.
--Immediate light and visibility data are key.	--Light and visibility data are less important except to look at significant seasonal variations such as extremely long periods of light and dark, heat and cold, or wet and dry.

--Temperature, humidity, wind or precipitation are each important to immediate tactical activities.	--The same factors are still important and may grow when considering theater wide requirements for such things as potable water, specialized clothing or such events as sand storms or monsoons which might preclude entire categories of activities.
--Weather is key for reaction to or exploitation of NBC operations.	--Weather is key not only for reaction and exploitations of NBC but also may play a significant role in the actual decision to employ such weapons.
--Weather is an essential part of evaluation the military aspects of terrain.	--Weather is generally less important for operational level concerns since more concerns are tied to facilities and LOC's and less affected by the weather; an important exception would be when considering the use of operational level fire or maneuver forces against operational level targets, especially if timing of execution is the critical factor.
--Seasonal changes may be of little importance since the tactical battles and engagements are likely to go on in any event; seasonal changes can be key at tactical levels, however, if preparations have not been made.	--Seasonal changes important not only for military activity but also for the economic, political, and socio-psychological elements of of power which must be co sidered; such things as harvests, plantings, religious periods, market times, and elections may have to be considered.

As can be seen in looking at the suggested changes for weather IPB the focus shifts away from what is the impact of the weather on the tactical battles and engagements to one of what

does the weather permit or preclude in broad categories of activities found at operational levels. The shift is not one of weather to climate, but of weather expanded to climate as one moves from tactical to operational levels.

ENEMY

Enemy templating is simultaneously one of the most difficult and yet the easiest to modify for the operational level IPB. It is difficult because the analytical thought processes must shift away from primarily the FLOT and the immediate area on either side; in other words shift from the killing areas of the tactical echelons. This is not because the operational commander is not concerned but because the operational area expands and is now somewhere to the enemy's rear, back to the enemy's communications zone, and sometimes to the enemy's homeland. Of course, the area is similarly expanded on the friendly side of the FLOT. Again, this in no way implies a lack of operational interest in tactical areas, it is just to reemphasize areas for which respective commanders have primary responsibility. Operational level enemy templating also may be more difficult since it may include economic, political, and socio-psychological factors, especially for conflicts near the lower end of the spectrum of conflict. Some aspects of operational level IPB are easier because the principles and practices of tactical level IPB already understood and followed are still applicable. However, the almost item-by-item, unit-by-unit detail present in tactical level IPB is presented in summary and aggregate form for operational level

templates. Certainly specific detail sufficient for targeting is required for operational level fires, such as missiles or air support or in the event of special or unconventional operations.

Finally, in looking at suggested modifications to the IPB process the on-going and detailed studies of enemy forces and enemy doctrine equally apply to either tactical or operational level IPB. It is the way the material is aggregated to support the level of command which makes the key distinction for operational or tactical level IPB of enemy forces. What follows are suggested modifications for changing the enemy templating of tactical level IPB to enemy templating for operational level IPB.

Tactical Level IPB	Operational Level IPB
--Data focuses mainly on combat forces of company through division level.	--Focus shifts to maneuver forces likely no smaller than division; joint and combined enemy forces are included; NBC and operational level fire and maneuver forces are key; unconventional and paramilitary forces may be considered.
--U.S. Army doctrine provides clearly delineated areas of influence and areas of interest for Corps and below.	--Lines delineating areas are less doctrinal and more likely to be international boundaries or lines negotiated by political or alliance agreements; actual area included in the total area of the operational level IPB may be subjective or even politically driven.

--High value targets are frequently determined by how they influence the on-going or near-term battle or engagement and by the capabilities of friendly weapons and detection systems.	--High value targets are selected because of influence on future battles; decisions are made on high value targets ahead of time and operationally engaged upon detection; actual impact on tactical battle may be delayed; this does not preclude the operational commander using operational assets to support tactical commanders.
--Rates of enemy movements are key to fighting the tactical battle.	--Rates of movement are still important, but transportation means and fixed facilities become key, i.e., the movement of an armor unit by rail to a staging area likely is more important at the operational level than the cross country movement capability of the armor unit.
--Force lay-down templates are likely to have mainly a ground forces flavor.	--Force lay downs expand to major elements of all types of military forces, especially NBC and operational level forces.
--The tactics of "how to" and "how done" are very important and focus on "when" will the enemy attack.	--Focus shifts to presence or or absence of major types of enemy forces and their activities; emphasis is on both the "if" and "when;" Indication and warning are relatively more important.
--Emphasis is put on "when" and "where" the battle begins.	--Interest lies in "when" and "where" to accept or not accept battles and engagements and how to position forces to influence operations.
--Actual enemy formations are important, i.e., how is he arrayed and what is his march order.	--March order and attack formations of units are less important than the actual presence or absence or enemy major units and their activity levels.

--Enemy C^3I is sought out and usually quickly engaged.	--Enemy C^3I also is sought out but deception and monitoring may take priority over immediate disruption or destruction.
--Concern lies with weapons actually employed in battles and engagements.	--Concern expands to include new or different weapons systems which could be employed including NBC or new technology weapons.
--Rear area protection centers on immediate rear of tactical military forces.	--Rear area mission expands to include enemy military and civilian areas.
--Threats in rear area primarily are enemy armed forces.	--Threats expand to include enemy deep reconnaissance elements and unconventional forces.
--The actual integration of weather, terrain, and enemy doctrinal templates is key for supporting battles and engagements.	--The actual integration of the IPB material is critical for intelligence support at operational levels; in addition to template generated, other material such as point papers or briefings must be included; integration is harder because more of the information will not be on the templates familiar at tactical levels.
--Tactical level IPB focuses on selecting named areas of interest (NAI) and target areas of interest (TAI) point out areas where tactical echelons can confirm or deny a specific activity or engage enemy forces with a high probability of favorable results; it is a very "now" oriented process.	--The same principles and processes remain valid for operational level IPB; however, elements from the non-military elements of power likely will be considered when selecting NAI and TAI.

Ultimately, the various IPB efforts at the tactical levels are designed to help "frame the commander's opportunities and options...and provide a means to influence...rather than react.[1]" And at tactical levels the final IPB product may be one or two

overlays reflecting key military decision points. At operational levels, data reduction to such a small number of decision support IPB templates is unlikely because the area has expanded and the non-military elements of power have been added. At operational levels the IPB will show activity levels, presence or absence of key elements, interplay of the military and non-military elements of power, and potential actions and reactions of enemy forces.

ENDNOTES

1. U.S. Department of the Army, Field Manual 34-3, Intelligence Analysis, Washington, 13 January 1986, p. 4-52.

CHAPTER IV

CONCLUSION

This paper provides a suggested analytical framework and suggested modifications to the tactical level IPB process so that the process can be applied to operational level intelligence estimates. The keys in any approach to intelligence analysis at the operational level of war are recognizing necessary changes to the traditional approaches of intelligence analysis at tactical level warfare. It is not implied that the successful approaches of tactical level IPB are wrong or incomplete or they they should be discarded. On the contrary, it is intended that the more precise and widely understood tactical level IPB process serves as a start point and then be adapted to fit the scale, scope, and objectives of the operational level commander in a theater of operation. Just as tactical level IPB went through a decade of refinement, so too will operational level IPB. This paper recommends places to start the process.

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3. U.S. Department of the Army. Field Manual 100-5: Operations: Washington: 5 May 1986.

4. U.S. Department of the Army. Field Manual 34-1: Intelligence and Electronic Warfare Operations: Washington: 2 July 1987.

5. U.S. Department of the Army. Field Manual 34-3: Intelligence Analysis: Washington: 13 January 1986.

6. U.S. Department of the Army. Field Manual 34-37: Echelons Above Corps Intelligence and Electronic Warfare Operations: Washington: 30 September 1987.

7. U.S. Army War College. Campaign Planning: Carlisle Barracks, PA: 4 January 1988.